

Conclusions, Recommendations and Concerns

The PSC appreciates and takes seriously its obligation to keep the legislature informed about reporting on the status of infrastructure and on the administration of Universal Service Fund programs. The Commission will continue to report on these items as required by statute and to identify new trends and concerns as the industry evolves. When Act 496 legislation was first under consideration, the meanings of “infrastructure” and “Universal Service” had very different connotations than they do today. Although these matters remain important, there are now broader issues than what type of switch is deployed in what area and how many dollars may be spent to support low-income customers. To monitor these changing conditions, the Commission will look broadly at the industry in the future and will continue to alert the legislature to concerns and new issues, and, as needed, to point out problems and difficulties in reporting because of the divergent state of regulation that applies to entities serving the wide telecommunications landscape.

This report provides a picture as to what telecommunications technologies exist in the state and where they are deployed. The report also provides information on current universal service fund expenditures and issues related to customer protection. Because of the continued and ongoing evolution in the communications industry, the Commission will continue to report on and review critical issues in the telecommunications industry and will identify those concerns and topics that will pose important policy questions in the future.

Infrastructure and Technologies

Overall, the infrastructure information filed with the Commission by incumbent and competitive providers indicates that Wisconsin providers have invested significantly in communications infrastructure. Fiber deployment continues to increase in the state and new technologies are building on existing systems and providing a robust architecture of networks. Information about all providers is not available, and it thus remains a difficult task to document all investments and capture all the providers and the markets they serve in the state. It is estimated that high-speed Internet deployments and investments by CATV, wireless, satellite and independent VoIP providers make up a growing segment of communications services.

Changes in telecommunications technologies continue to be dynamic and it is beneficial to maintain and track infrastructure and service deployment within the state. The Commission will persist in working with companies under price regulation and alternative regulation to highlight infrastructure

as a key element in developing these types of regulation plans. In addition, the Commission will provide comments to the FCC concerning policies and rulemakings that affect Wisconsin telecommunication providers and consumers. The Commission will continue collecting and publishing relevant data on deployment of infrastructure and new services offered in the state to provide legislators, local communities and customers with information on the status of the infrastructure deployment and changes in technology that are taking place in the state.

Broadband Deployment

Broadband deployment increased since 2002, although there are still some areas of the state where providers have been slower in rolling out the high-speed services. In some cases, wireless and CATV and even satellite providers offer an alternative to the ILECs and CLECs for high-speed services. As noted, a number of ILEC rural providers offer high-speed service to 100 percent of the customers within their serving areas and they continue to invest in and improve their service offerings. Broadband service availability is an important factor in future technology deployment as VoIP service offerings, which now require broadband access, becomes more widespread. New projects are also planned using fiber and wireless technologies which will further expand the broadband service offerings in the state. As broadband growth continues, the Commission will be monitoring issues that arise such as consumer protection for broadband customers.

Reporting

Both the ILECs and CLECs report information to the PSC on a regular basis that provides for trackable and publishable data that is generally reliable and accessible. While some of the data is reported confidentially, it usually can be masked when published to maintain confidentiality. Some competitive companies continue to report the areas they serve as confidential. While this is problematic, it is not the norm for most companies.

The more difficult task continues to be the documentation of broadband service offerings by CATV, wireless and satellite providers, including information on customer counts and areas where broadband service is offered. CATV companies participated in providing data for this PSC report, and only one large CATV provider declined to provide the information requested. Since these other providers are not under Commission jurisdiction, any information the companies provide to the Commission is voluntary. CATV and wireless and Satellite companies report some of this data to the FCC, and the Wisconsin Commission uses this information wherever possible to complete the picture of broadband service in the state. There is no repository for public statistics on VoIP providers, which leaves a gap in reporting as these service providers continue to offer services throughout the state.

Recommendations

The Commission recommends that the following changes be made regarding infrastructure and USF reporting under the statute.

- Report only on the specific infrastructure reporting subjects named in a.-d. under Wis. Stat. § 196.196(5)(f)1 when there is an issue with availability or deployment for these uses.

- Replace e. under Wis. Stat. § 196.196(5)(f)1. in reference to ISDN deployment with a more generic technologies reporting requirement.
- Require provider service areas to be reported on a non-confidential basis.
- Establish statutory authority under Wis. Stat. § 196.25 to allow the Commission to collect data from cable and wireless providers so that the legislature and public have relevant information.
- Change the annual USF reporting requirement to a biennial reporting requirement.
- Eliminate the statutory USF assessments restriction under Wis. Stat. § 196.218(3)(a)3.a.

Wis. Stat. § 196.196(5)(f):

1. Before January 1, 1996, and biennially thereafter, the Commission shall submit a report to the joint committee on information policy and technology describing the status of investments in advanced telecommunications infrastructure in this state. The report shall include information on the progress made in all of the following areas:
 - a. Distance learning, including the number of schools and other educational institutions connected to distance learning networks.
 - b. Interconnection of libraries, including the number of libraries with video conferencing and network access capabilities.
 - c. Access to health care.
 - d. Education, health care and employment opportunities for the disabled and other persons in the home.
 - e. Integrated services digital network deployment.
 - f. Other infrastructure investments identified by the Commission.

Act 496 established the infrastructure reporting requirement under Wis. Stat. §196.196(5)(f)1. regarding the status of infrastructure in the state. The Commission recommends that a- d. of that statute in reference to distance learning, interconnection of libraries, access to health care and education, health care and employment opportunities for the disabled and other persons in the home only require reporting information when there is an issue with service not being available or not being deployed in an area. The telecommunications infrastructure does not appear to be the limiting factor for the use of telecommunication to provide services for distance learning, interconnection of libraries, access to health care and service to persons with disabilities.

Item e. of Wis. Stat. § 196.196 (5)(f)1. concerns the specific reporting requirement on the use of integrated service digital network (ISDN). This technology is no longer a major item in infrastructure deployment. Faster broadband technologies have replaced ISDN for many uses, and therefore, ISDN is no longer an indicator of the status of a company's infrastructure. Item e. should be replaced with a more generic reference to current technology. It may also be reasonable to include time limits on statutory reporting requirements or to revise them periodically to allow the statute to adapt to the current market place situation.

Continued reporting by ILECs and CLECs will assist in the ongoing monitoring of deployment of infrastructure, technology and service offerings. All service areas should be reported on a non-confidential basis so that the areas served may be clearly defined.

The Commission also recommends that statutory authority under Wis. Stat. § 196.25 be revised to allow the Commission to collect data from CATV, wireless and VoIP providers so that the Legislature and the public have complete and relevant information covering all areas of the communications industry.²⁰

Changing the annual reporting requirement for USF to a biennial reporting requirement would enable the Commission to regularly combine the infrastructure report and the USF annual report. Having the same timing requirement for these reports and combining them would be an efficient way for the Commission to keep the Legislature informed.

Permanent statutory restrictions on the assessment levels for the USF budget are contradictory to the intent of the program. The statutes define universal service as “the availability of a basic set of essential telecommunications services and access to advanced service capabilities of a modern telecommunications infrastructure anywhere in this state.” Commission experience with the needs of the USF programs has shown that the predetermined annual budget of \$6 million dollars does not provide the necessary funding for programs intended to assist in meeting the goals of universal service. The USF budget levels should be determined by the state budget process like most other programs in the state and not be limited by an arbitrary assessment cap. Thus, removal of the USF assessment cap in Wis. Stat. § 196.218(3)(a)3.a. is recommended.

Concerns

In addition to making these recommendations on future infrastructure and universal service fund reporting, the Commission reiterates that with the evolving nature of the telecommunications industry, there are many other issues of importance to policy makers and consumers. The Commission intends to maintain monitoring of these matters. Specifically, the Commission will undertake the following and keep the legislature informed of these and other evolving issues in future reports:

- Monitor concerns and ongoing changes in the industry (on both the federal and state levels) and identify broader issues that may impact infrastructure and universal service.
- Provide review and input on consumer protection issues for broadband services and VoIP based voice services.
- Monitor and assist FCC efforts to reform USF support and intercarrier compensation regimes with the goal of protecting Wisconsin interests and providing input to the relevant debates at the FCC or in Congress.

²⁰ In the case of this report, the majority of the CATV providers were cooperative and provided data; however, one major company declined to provide the information the Commission requested. Public statistics for voice services using Internet Protocol (VoIP) are not available. This technology represents a very fast growing section of the communications technology and there is little to document what providers are available, where they serve customers and the cost of their service. It may be reasonable to establish a process to collect data from all providers, including CATV, satellite, wireless and VoIP type entities that provide communications and information services in Wisconsin. This data, reported to and available at a common collection point, could reside at the Commission or on another state web site and could be populated by the providers as new services and territories are added to the companies’ offerings. A central data source of this type would allow legislators, communities and consumers to access information on the types of services available, where the services are available and the names of the companies that provide services. This format would capture the relevant information in a consistent manner to document providers and technologies that are available for a given area.